# Indiana Epidemiology NEWSLETTER



Epidemiology Resource Center 2 North Meridian Street, 3-D Indianapolis, IN 46204 317/233-7416

February 2005 Vol. XIII, No. 2

## Estimated Influenza Vaccine Coverage Indiana and United States, January 2005

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In October 2004, a major supplier of influenza (flu) vaccine notified the Centers for Disease Control and Prevention (CDC) that its license had been suspended for three months. This resulted in a 50% reduction in expected supply of the vaccine (flu shot) for the United States for the current flu season (September 2004 – March 2005).

The Advisory Committee on Immunization Practices (ACIP) recommended that priority groups be given the vaccine first. These priority groups included adults ages 65 years and older, adults with chronic conditions such as asthma, health care workers with patient contact, women who are currently pregnant, children ages 6-24 months, and children ages 2-17 years with a chronic condition. The CDC and state health departments have been working together to provide the vaccine to these priority groups.

In order to assess the use of influenza vaccine among priority and non-priority groups as well as primary reasons reported for not receiving vaccine, questions were added to the ongoing Behavioral Risk Factor Surveillance System (BRFSS) survey beginning on November 1, 2004. Monthly data from these flu questions are provided to

all states along with national data for comparison. The additional questions asked about both adult and child receipt of the flu vaccine. The BRFSS is a monthly, state-based, random digit-dial telephone survey of civilian, non-institutionalized adults ages 18 years and older. Results from January 1-22, 2005, are presented here.

Approximately 21% (21.3%) of Indiana respondents reported that they had received a flu shot this flu season, comparable to the national figure of 21.7%. Use of live influenza vaccine (Flu Mist) was rarely reported in Indiana or the United States (0.5% and 0.4%, respectively).

Respondents were significantly more likely to have received an influenza vaccination in the past flu season (September 2003-March 2004) than in the current flu season (September 2004-March 2005). Approximately 44% of Indiana respondents reported having received an influenza vaccination in the past flu season, while only 21.3% reported having received the vaccine this flu season. National data were comparable.

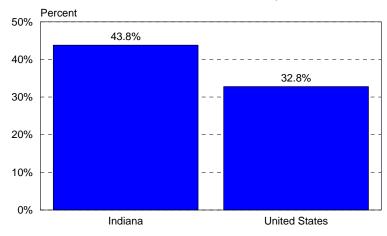
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For Indiana adults in any priority group, fewer reported having received an influenza vaccination in the current flu season than in the past flu season (43.8% vs. 53.5%, respectively); however, the difference was not statistically significant. At the national level, significantly fewer adults in any priority group also reported having received an influenza vaccination in the current flu season than in the past flu season (32.8% vs. 48.8%, respectively). Significantly more Indiana adults in any priority group had received an influenza vaccination compared to the national average (Figure 1).

Figure 1.

## Adults in Priority Group Who Received Vaccine in Current Flu Season\*

Indiana vs. United States, January 2005



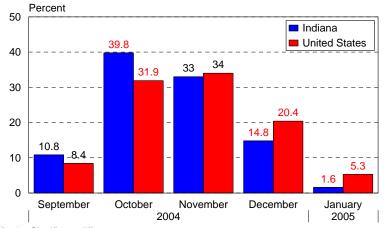
\*September 2004-March 2005 Source: Behavioral Risk Factor Surveillance System

Respondents who reported having received a flu vaccination in the current season were asked in which month they had received the vaccination. Compared to the rest of the nation, significantly more Indiana respondents reported having received the vaccination in September and October 2004. However, significantly fewer Indiana respondents reported having received the vaccination in December 2004 and January 2005 compared to the nation (Figure 2).

Figure 2.

#### Month Received Vaccine in Current Flu Season

Indiana vs. United States, January 2005



\*Red = Significant difference

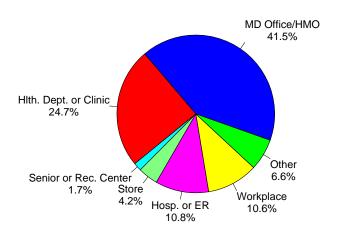
Source: Behavioral Risk Factor Surveillance System

Adults who reported having received a flu vaccination in the current season were asked where they had received the vaccination. Approximately two-thirds of Indiana respondents reported that they had received the vaccination in a doctor's office/health maintenance organization or in a health department or clinic (Figure 3). National results were comparable.

Figure 3.

## Type of Place Respondent Received Vaccination

Indiana, January 2005



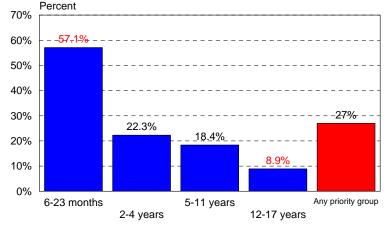
Source: Behavioral Risk Factor Surveillance System

Respondents were asked whether children in the household had received the vaccination. Nationally, 19.8% of children had received an influenza vaccination in the current flu season, compared to 27.8% in the past flu season, a significant difference. Children ages 6-23 months were significantly more likely than other age groups (57.1%) to have received a vaccination in the current flu season. Children ages 12-17 years were significantly less likely than younger children to have received an influenza vaccination in the current flu season. Overall, 27% of children in any priority group received a vaccination in the current season (Figure 4).

Figure 4.

## Children that Received Vaccination in Current Flu Season by Age

United States, January 2005



Data not available for infants <6 months of age

'Red = Significant difference

Source: Behavioral Risk Factor Surveillance System

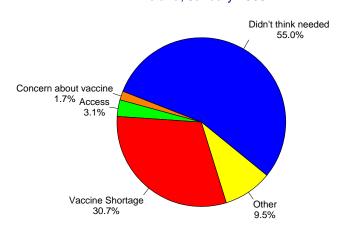
In Indiana, approximately 17% of children had received a vaccination in the current flu season compared to 22.7% in the past season; however, the difference was not significant. There were not enough respondents to provide data by child age groups.

For the children who did not receive a flu vaccination in the current season, the majority of adult respondents (55.0%) reported that they did not think it was needed. The vaccine shortage ("saving vaccine for people who need it" or "tried to find vaccine but could not get it" or "not eligible to receive vaccine") was the reason for 30.7% of respondents (Figure 5).

Figure 5.



Indiana, January 2005



Source: Behavioral Risk Factor Surveillance System

Approximately 17% of Indiana children had received a flu vaccination in the current flu season. There are not enough respondents to provide additional detail at this time.

The current flu season will continue for several more months. Restrictions on the vaccine have been lifted. Concerns remain that not enough residents in priority groups, as well as the rest of the population, have received the vaccine. Only 10% of Indiana respondents ages 18-49 years reported having received the vaccine this season, and only 19% (18.7%) of adults ages 50-64 years reported having received the vaccine. One-third of adults ages 65 years and older have yet to be vaccinated, along with over 50% of adults in other. It is recommended that residents continue to obtain the influenza vaccination as long as the influenza virus is circulating in our communities.



## Reduce Antibiotic Use – Reduce Antibiotic Resistance

Two main types of germs – bacteria and viruses, cause most infections. Antibiotics kill bacteria, not viruses. They will not cure colds, the flu, most coughs and viral bronchitis, runny noses, or sore throats not caused by strep.



Antibiotic resistance is one of the world's most pressing public health problems. At the same time, the pharmaceutical pipeline for new antibiotics is drying up. Instead, many drug manufacturers are developing medicines that are for chronic illnesses such as high cholesterol, diabetes, and arthritis.

The number of bacteria resistant to antibiotics has increased in the last decade. According to the Centers for Disease Control and Prevention (CDC), nearly all significant bacterial infections in the world are becoming resistant to the most commonly prescribed antibiotics. Every time a person takes antibiotics, sensitive bacteria are killed, but resistant germs may be left to grow and multiply. Repeated and improper uses of antibiotics are major forces driving the increase in drug-resistant bacteria.

#### What Can You Do?

#### As a health care provider:

- ✓ Use more narrow spectrum antibiotics to treat bacterial infections.
- ✓ Take the time to explain to patients why an antibiotic might not be appropriate to use.
- ✓ Inform patients of the usual time course of their illness so that they know when to expect to feel better.
- ✓ Suggest supportive treatments if indicated, such as antihistamines, decongestants, analgesics, plenty of fluids, and rest.

#### As a patient:

- ✓ Do not demand antibiotics when a health care provider has determined they are not needed.
- ✓ Take all medication as prescribed, even if symptoms disappear. If treatment stops too soon, some bacteria may survive and cause illness to worsen again.
- ✓ Do not share your medication with others, and do not take medicine prescribed for someone else.

The CDC has begun a national campaign to promote appropriate antibiotic use. Its objective is to decrease inappropriate use and thereby reduce the threat of antibiotic resistance.

For more information, please call 1-888-246-2675 or visit <a href="www.cdc.gov/getsmart">www.cdc.gov/getsmart</a>. For free *Get Smart* educational materials for your organization or health care site, please call Judy at 1-317-221-3022 or request an order form by e-mail at <a href="jwhorton@hhcorp.org">jwhorton@hhcorp.org</a>.

Resources: Media Fact Sheet – Cold and Flu Season: No Reason for Antibiotics; Get Smart: Know When Antibiotics Work.

#### **Editors Note:**

Judy Whorton, R.N., is a nurse at the Marion County Health Department. She is working with the Indiana Coalition for Antibiotic Resistance Education Strategies (ICARES). ICARES is promoting The Centers for Disease Control and Prevention's "Get Smart: Know When Antibiotics Work" program. This is a national campaign with the following objectives:

- Reduce inappropriate antibiotic use
- Reduce the spread of resistance to antibiotics

Judy is available for consultation with local health department staff and other health care professionals about the appropriate use of antibiotics. She also can provide educational materials that could be used for health fairs and other local campaigns.

#### **Meningococcal Conjugate Vaccine**

Meningococcal (Groups A, C, Y and W-135) Conjugate Vaccine (MCV-4) February 10, 2005

Tom Kerr, B.S., R.N. ISDH Communicable Disease

#### ACIP Recommends Meningococcal Vaccine for Adolescents and College Freshmen

The Advisory Committee on Immunization Practices (ACIP) to the Centers for Disease Control and Prevention (CDC) has recommended that children ages 11-12 years and teens entering high school, as well as college freshman living in dormitories, receive a newly licensed meningococcal vaccine. The U.S. Food and Drug Administration (FDA) licensed this vaccine on January 14, 2005, for use in people ages 11-55 years. It is manufactured by Sanofi Pasteur and is marketed as Menactra<sup>TM</sup>.

Meningococcal disease is caused by bacteria that infect the bloodstream and the lining of the brain and the spinal cord, often causing serious illness. Every year in the United States, between 1,400 to 2,800 people acquire meningococcal disease. Ten to 14 percent of people with meningococcal disease die, and 11-19 percent of survivors have permanent disabilities, such as mental retardation, hearing loss, and loss of limbs.

The disease often begins with symptoms that can be mistaken for common illnesses, such as the flu. However, meningococcal disease is particularly dangerous because it progresses rapidly and can kill within hours.

"Meningococcus is a serious disease that kills about 300 people each year in the U.S. We are encouraged that today's ACIP recommendation will help to prevent this potentially deadly disease among adolescents," said Dr. Stephen Cochi, Acting Director of the National Immunization Program at CDC.

The ACIP has an existing recommendation for a routine doctor's visit for children ages 11-12 years, at which they may receive a tetanus-diphtheria booster shot. With the new recommendation, these same children will also receive the meningococcal vaccine at this routine visit. In order to foster the most rapid reduction of meningococcal disease following this recommendation, the committee also recommended that during the next 2 to 3 years, teens entering high school also should be vaccinated. College freshman who live in dormitories are at higher risk of meningococcal disease than other college students and should also be vaccinated. Meningococcal vaccine may also be provided to college students who do not live in dormitories and adolescents who want to reduce their risk for meningococcal disease.

The vaccine is highly effective. However, it does not protect people against disease caused by "type B" meningococcal bacteria. This type of bacteria causes one-third of meningococcal cases. More than half of the cases among infants less than one year are caused by "type B," for which no vaccine is licensed or available in the United States.

Source: <a href="http://www.cdc.gov/nip/vaccine/meningitis/mcv4/mcv4\_acip.htm">http://www.cdc.gov/nip/vaccine/meningitis/mcv4/mcv4\_acip.htm</a>



## **ISDH Data Reports Available**

The ISDH Epidemiology Resource Center has the following data reports and the Indiana Epidemiology Newsletter available on the ISDH Web Page:

http://www.in.gov/isdh/dataandstats/data and statistics.htm

Indiana Cancer Incidence Report Indiana Mortality Report (1990, 95, 96, 97, 98, 99, 2000) (1999, 2000, 2001, 2002)

Indiana Cancer Mortality Report Indiana Natality Report (1990-94, 1992-96, 1999, 2000) (1998, 99, 2000, 2001, 2002)

Indiana Health Behavior Risk Factors Indiana Induced Termination of Pregnancy Report (1999, 2000, 2001, 2002) (1998, 99, 2000, 2001)

Indiana Health Behavior Risk Factors (BRFSS)

Newsletter (9/2003, 10/2003, 6/2004, 9/2004)

Indiana Marriage Report (1995, 97, 98, 99, 2000)

Indiana Hospital Consumer Guide Indiana Infectious Disease Report (1996) (1997, 98, 99, 2000, 2001)

Public, Hospital Discharge Data
(1999, 2000, 2001, 2002)

Indiana Maternal & Child Health Outcomes & Performance Measures
(1990-99, 1991-2000, 1992-2001)

### **HIV** Disease Summary

#### Information as of January 31, 2005 (based on 2000 population of 6,080,485)

#### HIV - without AIDS to date:

333	New HIV cases from February 2004 thru January 2005	12-month incidence	5.48 cases/100,000	
3,626	Total HIV-positive, alive and without AIDS on January 31, 2005	Point prevalence	59.64 cases/100,000	
AIDS cases to date:				
357	New AIDS cases from February 2004 thru January 2005	12-month incidence	5.87 cases/100,000	
3,653	Total AIDS cases, alive on January 31, 2005	Point prevalence	60.08 cases/100,000	
7,497	Total AIDS cases, cumulative (alive and dead)			

## REPORTED CASES

of selected notifiable diseases

	Cases Reported in January	
Disease	MMWR Weeks 1-4 2004	MMWR Weeks 1-4 2005
Campylobacteriosis	7	4
Chlamydia	1,189	1,478
E. coli O157:H7	3	0
Hepatitis A	4	0
Hepatitis B	0	0
Gonorrhea	483	634
Legionellosis	0	0
Lyme Disease	0	0
Meningococcal, invasive	1	1
Pertussis	0	1
Rocky Mountain Spotted Fever	0	0
Salmonellosis	12	3
Shigellosis	2	0
S. pneumoniae (DRSP) Invasive Drug Resistant	10	5
S. pneumoniae (Invasive) (less than 5 years of age)	3	2
Primary and Secondary Syphilis	5	3
Tuberculosis	13	5
Animal Rabies	0	1 (bat)

For information on reporting of communicable diseases in Indiana, call the ISDH Communicable Disease Division at (317) 233-7665

## Indiana Epidemiology Newsletter

The *Indiana Epidemiology Newsletter* is published by the Indiana State Department of Health to provide epidemiologic information to Indiana health professionals and to the public health community.

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